

Flora and fauna of Egmont National Park



Taranaki

Egmont National Park is situated in the west of the North Island, about halfway between Wellington and Auckland. Unlike other national parks in New Zealand, it is surrounded by a well-developed and densely settled agricultural landscape.

The park is a mountainous area that encompasses three volcanic cones. The main peak of Mount Taranaki (2,518 metres above sea level) forms the nucleus of the park. It is the most recent and only active volcanic peak in the park, although it is now considered dormant. Because it is considered one of the most symmetrical mountains in the world, it is a very distinctive landmark. The other two volcanic cones, which are now extinct, form the basis of the Pouakai and Kaitake Ranges in the north-western part of the park.

R. Henderson



Landforms

Lava flows, ash showers and lahars (debris flows) have transported volcanic material away from the peaks. The oldest lava flows on Mount Taranaki are preserved in the west, but erosion has removed a number of older flows, resulting in the picturesque forms of Humphries Castle, Lion Rock and Warwick Castle (Tahuna a Tutawa). Fanthams Peak was formed when magma found a weak point in the volcano and created a secondary vent on the side of the mountain.

Vegetation

Egmont National Park is important nationally because it contains a diverse range of vegetation that has developed in an environment of frequent volcanic activity. The vegetation ranges from semi-coastal and montane forest to tussocklands, alpine and scree communities. The vegetation changes in a remarkably short rise in altitude compared to other places.

The forests of the park are composed of native conifer and broadleaved tree species, with beech trees notably absent. Other outstanding features are the large number of northern rata trees and one of the most extensive kahikatea-rimu-kāmahi semi-swamp forests in the North Island.

The vegetation patterns in Egmont National Park are complex. The vegetation at any given place is the product of not only climate but also of the site's parent rock material, slope, aspect, drainage and soils. Past and ongoing disturbances also influence the patterns (e.g. volcanic eruptions, landslides, cyclones, logging and browsing by introduced mammals). As a result, the vegetation types do not form predictable altitudinal zones. For example, the tall, lowland rimu-kāmahi-rata forest is replaced by relatively low stature forest on the western slopes of Mount Taranaki, where debris flows devastated the forest less than 400 years ago.

A third of the park's plant species are found in a small



area of swampland called Ahukawakawa, which lies between the main cone and the Pouakai Range. The area forms the headwaters of the Stony River (Hangatahua), which is also protected for its cultural, historic and scenic values. Many of the plants found here have special adaptations to the acidic soils and very low temperatures.

Another unusual type of vegetation found in the park is the high-altitude kāmahi forest known as 'Goblin Forest'. When volcanic eruptions destroyed large areas of rimu forest about 400 years ago, kāmahi became the dominant species here. Many of the kāmahi trees are growing epiphytically on old tōtara and rata trees destroyed by the eruptions. They developed distinctive gnarled, intertwined trunks as they grew around the old, dead trees. The heavy rain, highly leached soils and cold temperatures of these forests make suitable conditions for kāmahi, while other forest types cannot survive.



Dracophyllum filifolium
C. Rudge



Mountain foxglove
C. Rudge



Longhorn beetle on
Egmont hebe A. Dijkgraaf

Tarns, Ahukawakawa C. Rudge



Powelliphanta land snails.

In the past, goats have hugely modified the understorey of the forest through browsing, bark biting and trampling. Today, thanks to intensive goat control operations, goat impacts are negligible.

Although most of the park is free of introduced plants, several potential weed problems exist. Wild ginger was a major problem in the park prior to a concentrated removal effort in the early 1990s, and surveillance continues in case of any major re-establishment. *Asparagus scandens* has also become a major problem in regenerating forests of the Kaitake Range fringe. Old man's beard and hawkweed are also potential invaders.

What is DOC doing?

Egmont National Park is an island of indigenous vegetation surrounded on all sides by pasture. This provides an opportunity to protect and enhance threatened species here, through intensive protection and pest control operations. The Department of Conservation aims to monitor threatened species, to provide ongoing protection against threats such as introduced plants and animals, and to reintroduce species that have disappeared from the park once the habitat is deemed safe for them. Blue duck (whio) have already been reintroduced to the park and ongoing translocations are occurring to ensure the successful establishment of the population. Kiwi and blue duck restoration programmes are being supported by various sponsors including Taranaki Kiwi Trust, Central North Island Blue Duck Recovery Trust and the Bank of New Zealand.

Wildlife

As the only large forest tract within the Egmont Ecological District, the park provides the district's only habitat for many bird species. Twenty eight native bird species and 15 introduced bird species occur regularly in the park. Threatened species include North Island brown kiwi, fernbird and blue duck.

The park is home to several unique invertebrate species, and almost half of New Zealand's indigenous fish species are found in or near the park. Nationally threatened fish species include the giant kokopu, short-jawed kokopu, banded kokopu and koaro.

Threats

Introduced mammals continue to have a large impact on the park's native inhabitants, through predation and the destruction of healthy natural habitat. Possums in particular have affected canopy tree species, leading to the death of large areas of trees through defoliation. Possums also eat bird eggs and chicks and large invertebrates such as the giant

Further information

For more information about the flora and fauna of Egmont National Park, contact the Department of Conservation Wanganui Conservancy Office or visit www.doc.govt.nz.